



Anaerobic Digester Projects  
Flexachem support



## Summary

- Privately owned Cork based company founded in 1982
- The company portfolio delivers expertise for our customers across all business sectors
- Product focus of **Safety** through **Reliability** of performance – Giving our customers improved Uptime
- Focussed portfolio support via dedicated teams in Process Equipment, Valves, Pumps & Mechanical Seals

- Chemical
- Pharmaceutical
- Biotechnology
- General Process Industries
- Refinery plants
- Energy generation
- Paint
- Cosmetics
- Food and Beverage
- Meat Processing
- Water & Waste Water treatment
- Steam & Utility Applications
- Contractors & Process Skid Builders







Partnership approach  
with our clients to  
deliver engineered  
solutions to meet  
your application &  
performance needs –  
from component to  
project turnkey

# General summary

## Primary offerings

- Tank agitators [Vertical, Side entry & Submersible]
- Transfer pumps & Macerators
- Centrifugal & Vacuum pumps
- Isolation, Divert & Shut-off Valves
- Tank Cleaning & CIP delivery
- Aeration systems
- Vapour control & safety
- Corrosion Resistant / Low friction pipework
- Pipeline components
- Water Treatment
- Heat Exchangers & Cooling Towers

## Secondary offerings

- Project management
- Process / Chemical engineering
- Flow meters
- Tank OEMs localised in Ireland



# Tank Agitators – Centrally or Side mounted

---



Progressive Cavity

Rotary Lobe



Macerator



# NETZSCH

## Transfer pumps + Macerators





Vacuum + Centrifugal pumps

---





**ABO** *valve*



# Isolation, check & Shut off Valves

---



# Isolation / Divert & Control Valves

---



Up to 9 metres



Up to 14 metres



Up to 24 metres



# Tank Cleaning & Delivery of CIP

---

Note – Lechler have Cone nozzles to facilitate the wetting of dried goods if needed



Submersible pumps



Diffusers



Submersible aerators

# Aeration systems

---



Flame Arrester



Venting



Bursting discs



# Vapour control



Corrosion resistant  
and low friction  
pipework



Filters + Strainers



Tank Level Gauges



Expansion Bellows

# Pipeline & Tank components

---



# Water Treatment

---

Tank agitators, static mixers, valves, pumps, submersible pumps, submersible agitators, surface & immersed aeration + diffusers





# Heat Exchangers & Cooling Towers



Shell & Tube

Cooling Towers



Plate + Frame

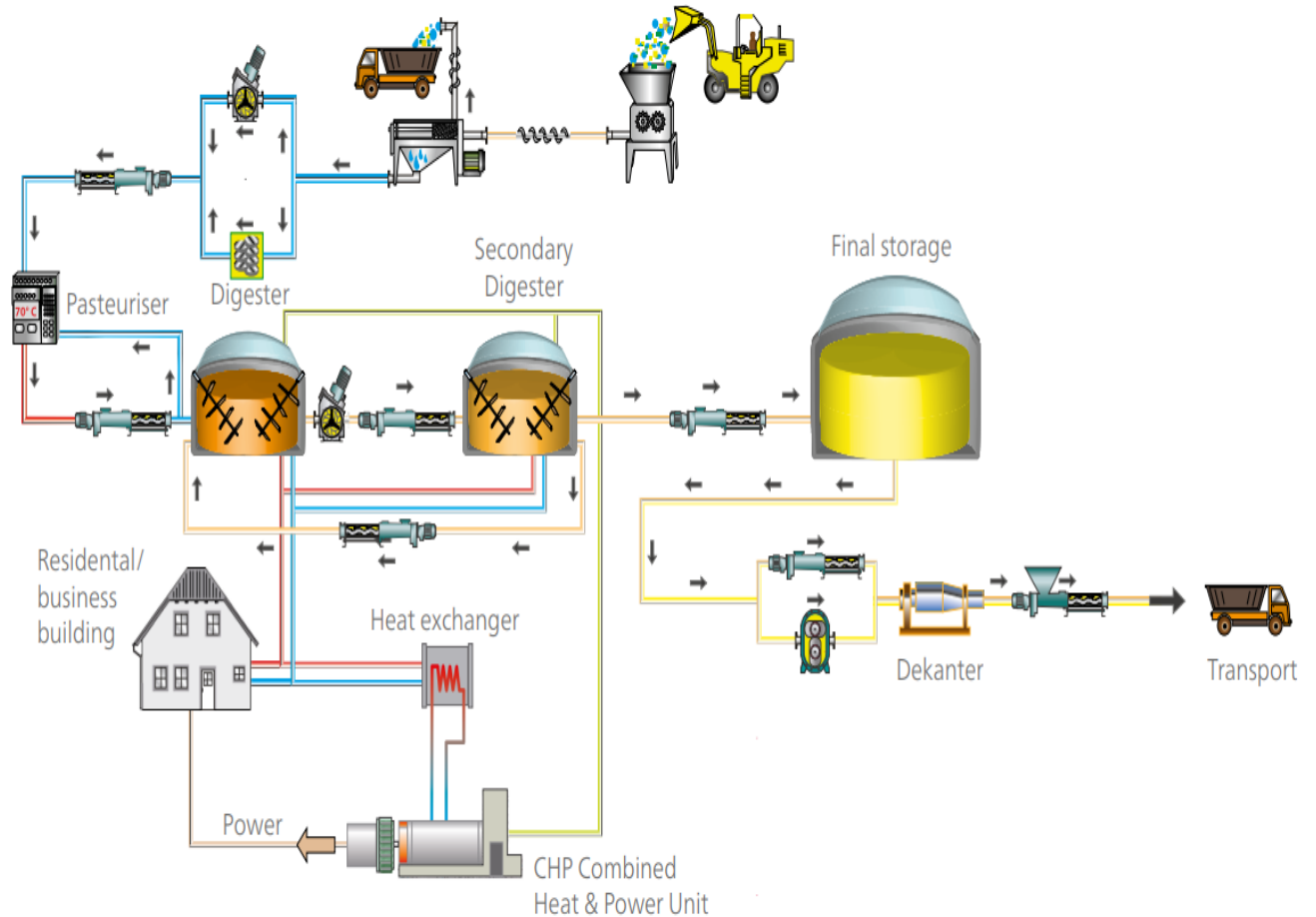
**Kelvion**



# General Overview – AD with Organic Waste

- Typical process flow with positioning of the pumps
- Produce intake ( Oils, Fats, Organic waste..etc)
- Separation and particle size reduction
- Settling tanks
- Digester feed
- Pasteuriser
- Outbound
- Heat Recovery

## Operation with organic waste



# Project Flow

## Basic Process Flow Diagram

- Define basic volumes, flow rates and pipeline sizes end to end

## Detailed Process Flow Diagram

- Evolved specification and URS development  
Mechanical specifications

## Overlay P&ID

- Inclusion of instrumentation, control and automation

## Specification for enquiry

- Bill of materials listing
- Partnership commentary and submission of costs
- PO discussion

## Equipment schedule

- Delivery
- Install
- Close out



# Technical Comment

---

We encourage discussion on options to maximise efficiency & optimise the budget

ATEX discussions will have a bearing on solutions offered

Lead times options will also be tabled

Site commissioning and sign off protocol to be agreed per product type in advance of purchase

Service engineers subject to our partners rate of site costs

# Lead times

---

- Very upper level – most items are deliverable within 24 working weeks
- Longer lead items are typically agitators, tanks, cooling towers, aeration systems, some pumps
- Most other items fall into the 6-16 weeks bracket for delivery once specifications are known & confirmed with the factory
- Lead times are dependent on specifications agreed for the duties, factory loading, materials availability, payment stages and client approval for any drawings relevant for manufacture



# Finance

---

- Once overall budget is worked out this can be discussed
- A value package will also be available for multiple equipment spend
- Typically for CAPEX spend, stage payments will be involved
- Formal Purchase Order required for ISO audit purposes



# Project Support

---



Process

- Michael Bradley



Pumps

— Phil Soltan



Valves

– Brendan  
Merrigan

[Project Lead] [Michael.Bradley@flexachem.com](mailto:Michael.Bradley@flexachem.com)

Mobile +353 86 0476178

[Phil.soltan@flexachem.com](mailto:Phil.soltan@flexachem.com)

Mobile +353 86 1853782

[Brendan.merrigan@flexachem.com](mailto:Brendan.merrigan@flexachem.com)

Mobile +353 87 2598124